

# (12) United States Patent Clark

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# (54) METHOD OF MANUFACTURING PET **NURDLES**

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#### (57)ABSTRACT

A method of recycling PET into PET nurdles, comprises: (A) grinding recycled PET bottles into a group of flakes; (B) washing the flakes; (C) identifying and removing impurities, including impure flakes, from the group of flakes; (D) passing the group of flakes through an MRS extruder while maintaining the pressure within the MRS portion of the MRS extruder below about 18 millibars; (E) passing the resulting polymer melt through at least one filter having a micron rating of less than about 50 microns; and (F) forming the recycled polymer into PET nurdles. In various embodiments, the polymer melt is formed into PET nurdles using any suitable technique such as, for example, any suitable strand pelletizing or melt pelletizing techniques.

# 20 Claims, 5 Drawing Sheets

